

**RERTR-2006 International Meeting on Reduced Enrichment for Research and Test Reactors**  
Cape Town, South Africa, October 29 - November 2, 2006

**PROGRAM: Tuesday - Oct. 31, 2006**

| Session | Session Title   | Time       | Paper Title  | Authors  |
|---------|---|------------|--|--|
| Tuesday | <b>Meeting Room: Stellenbosch – Constantia (Second Floor)</b>                       |            |  |  |
| 5       | <b>Conversion Analysis - Part 1</b><br>Co-Chairs: N. Hanan, R. Skoda                | 8:00 a.m.  | 1 Calculation Studies to Substantiate Trial of Pilot Low-Enriched FAs in the WWR-K Reactor<br>2 Core Conversion Analyses for the Portuguese Research Reactor<br>3 Steady-State and Loss-of-Flow Transient Modeling for Tajoura Nuclear Research Reactor<br>4 Analyses of the IRT, Sofia Initial LEU Core Performance<br>5 Conversion of Australia's HIFAR Research Reactor to LEU Fuel   | F. Arinkin, P. Chakrov, L. Chekushina, Sh. Gizatulin, K. Kadryzhanov, S. Koltchnik, V. Nasonov, A. Taliev, Zh. Zhotabaev, Zh. Zhumadilova<br>J. Matos, J. Stevens, E. Feldman, J. Stillman, F. Dunn, K. Kalimullah, J. Marques, N. Barradas, A. Ramos, A. Kling<br>F. Bsebsu, P. Garner, N. Hanan<br>T. Apostolov, S. Belousov, N. Hanan, J. Matos<br>G. Storr   |
| 6       | <b>Fuel Development - Part 1</b><br>Co-Chairs: J. Snelgrove, W. van Zyl de Villiers | 10:25 a.m. | Morning Tea      Second Floor Lobby  |  |
|         |   |            | 1 Progress in the U.S. RERTR Fuel Development Program<br>2 Current Status of the Development of High Density LEU Fuel for Russian Research Reactors<br>3 Development of Dispersed UMo fuel : An Oxide Layer as a Protective Barrier of the UMo Particles<br>4 Advanced Development in U-Mo Dispersed and Monolithic Fuels  | M. Meyer, R. Ambrosek, G. Chang, C. Clark, M. Flinlay, G. Hofman, D. Keiser, D. Meyer, G. Moore, K. Moore, J. Snelgrove, D. Wachs, T. Wienczek, J. Wight, J. Williams<br>A. Vatulin, I. Dobrikova, V. Suprun, E. Kartashev, V. Lukichev, V. Troyanov, A. Enin, P. Shornikov<br>S. Dubois, F. Mazaudier, H. Palancher, P. Martin, C. Sabathier, M. Ripert, P. Lemoine, C. Jarousse, M. Grasse, N. Wieschalla, W. Petry<br>E. Pasqualini   |
| 7       | <b>Poster Session</b><br>Paar (Second Floor)<br>Organizer: J. Holland               | 1:00 p.m.  | Lunch      The Villa (Second Floor)  |  |
|         |   |            | 1 Update on U-Mo Fuel Processing and Characterization<br>2 Analyses of Flow Excursion Experiments Relevant to Research Reactors: Revised<br>3 Results for the Recent Activities of Reduced Enrichment Program for Research Reactors in Chile<br>4 Development of Radiographic Examination Method of SAFARI-1 LEU Fuel Plates<br>5 Thermodynamic and Kinetic Features of the Oxidation Treatment of U7Mo Particles<br>6 A Method of Determining a Start of Porosity and Defect Formation in the Fuel Elements with U-Mo Fuel<br>7 Modeling the Integrated Performance of Dispersion and Monolithic U-Mo Based Fuels<br>8 Mixed Fuel Versus Low Enriched Fuel in the Syrian MNSR<br>9 Production of Iodine-131 from Low Enriched Uranium Targets | G. Moore, J. Jue, C. Clark, D. Burkes<br>A. Olson<br>M. Barrera, J. Lisboa, J. Marin, L. Olivares, K. Bakker, F. Wijtsma<br>J. de Villiers<br>F. Mazaudier, C. Proye, J. Miragaya, S. Dubois, P. Lemoine, C. Jarousse, M. Grasse<br>O. Golosov, M. Lyutikova, E. Kartashev, V. Lukichev<br>D. Wachs, D. Burkes, S. Hayes, K. Moore, G. Miller, G. Hofman, Y. Kim<br>M. Albarhoum<br>P. Cristini, D. Cestau, R. Bavaro, M. Bronca, R. Centurión, A. Novello, J. Cestau, E. Carranza |
| 8       | <b>Conversion Analysis - Part 2</b><br>Co-Chairs: I. Goldman, TBD                   | 2:00 p.m.  | 1 Physics Design for in Hospital Neutron Irradiator with LEU Fuel<br>2 Monte Carlo Calculations for Low-Enrichment of MNSR Fuel<br>3 Criticality Calculations and Transient Analysis of the Nigeria MNSR (NIRR-1) for Conversion to LEU<br>4 Progress in the Neutronic Core Conversion (HEU-LEU) Analysis of Ghana Research Reactor-1  | K. Guo-tu, S. Zhi-yong, L. Zheng, S. Feng<br>L. Yiguo, X. Pu<br>S. Jonah, J. Liaw, J. Matos, A. Olson<br>S. Anim-Sampong, B. Maakuu, E. Akaho, A. Andam, J. Liaw, J. Matos   |
| 9       | <b>Fuel Development - Part 2</b><br>Co-Chairs: H. Taboada, T. Totev                 | 3:45 p.m.  | Break      Second Floor Lobby  |  |
|         |   |            | 1 Update on Monolithic Fuel Fabrication Methods<br>2 Fuel Manufacture in South Africa: The Road to Conversion<br>3 Design and Status of RERTR Irradiation Tests in the Advanced Test Reactor<br>4 Update on Uranium-Molybdenum Fuel Foil Fabrication Development at the Y-12 National Security Complex<br>5 Preparation of Life-Time Test of the Full-Scale IRT-Type Fuel Assembly in the MIR Reactor<br>6 Manufacturing Results of Monolithic UMo Full Size Prototype Plates  | C. Clark, J. Jue, G. Moore, N. Hallinan, B. Park, D. Burkes<br>R. Jamie, A. Kocher<br>D. Wachs, R. Ambrosek, G. Chang, M. Meyer<br>R. Dunavant, A. DeMint, J. Holt<br>A. Vatulin, I. Dobrikova, V. Suprun, E. Kartashev, V. Lukichev, V. Troyanov, A. Enin<br>C. Jarousse, P. Lemoine, P. Boulcourt, W. Petry, A. Rohrmoser  |
|         |   |            | 6:00 p.m. Adjourn  |  |